



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

US EPA RECORDS CENTER REGION 5



475643

REPLY TO THE ATTENTION OF:

MEMORANDUM

SUBJECT: Action Memorandum: Request for Approval of an Emergency Removal Action at the Jacamar Fire Response ER Site (SSID # C55Z) located in Springboro, Warren County, Ohio 45066

FROM: Steve Renninger, OSC
Emergency Response Branch 1

THRU: Jason H. El-Zein, Chief
Emergency Response Branch 1

TO: Richard C. Karl, Director
Superfund Division

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of the selected emergency removal action taken at the Jacamar Fire Response ER Site located in Springboro, Warren County, Ohio 45066 (site) and a ceiling amount not to exceed \$386,000. This emergency response action was necessary to mitigate the immediate threat to public health, welfare, and the environment posed by the potential release of unknown chemicals from a residential property fire and possible dispersion to the environment. On February 12, 2015, Branch Chief Jason El-Zein verbally approved \$100,000 in funding to initiate the response. On February 24, 2015, Branch Chief Jason El-Zein verbally approved an additional \$100,000 in funding to continue the emergency response.

The Action Memorandum, if approved, will serve as authorization for expenditures by the Environmental Protection Agency, as the lead technical agency, for actions described herein to abate the imminent and substantial endangerment posed by hazardous substances at the site. The response actions were conducted in accordance with Section 104(a)(1) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC 9604(a)(1), and 40 CFR Section 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) to abate the immediate threats posed to public health and/or the environment.

The presence of unsecured hazardous substances present at the site required that this action be classified as an emergency removal action. The project will require approximately 20 on-site working days to complete.

There are no nationally significant or precedent setting issues associated with the site. The site is not on the National Priorities List (NPL).

II. SITE CONDITIONS AND BACKGROUND

Site Name: Jacamar Fire Response ER Site

Superfund Site ID: C55Z

CERCLIS ID: OHR000191569

Location: 25 Jacamar Court, Springboro, Warren County, Ohio 45066

Latitude: 39.5641330, Longitude: -84.2443399

Category: Emergency Response

NRC Number: 1108529

Removal Start Date: February 12, 2015

A. Site Description

1. Removal site evaluation

Unknown chemicals were involved in the February 4, 2015 residential fire. During the February 9, 2015 fire investigation by local response agencies, a shock sensitive chemical exploded and burnt. On February 10, the Ohio EPA requested EPA assistance. On February 11, 2015, the property owner informed the fire investigation team that the basement of the residence contained a chemical lab with picric acid, mercury, and sodium cyanide. EPA documented the following chemical container labels: Ferric Chloride, Methanol, Acetone, Cobalt Chloride, Mercury, Hydrochloric Acid, and Toluene. EPA samples documented containers with flashpoints of: 33 degrees F, 59 degrees F, and 136 degrees F, which is considered RCRA characteristic for flammability pursuant to 40 C.F.R. § 261.21 EPA samples also documented containers with pH <1 which is considered RCRA characteristic for corrosivity pursuant to 40 CFR 40 C.F.R. § 261.22. Chemical containers were unsecured, damaged, and mixed with the fire debris. Chemical waste was observed in the fire debris, run-off, and swimming pool.

2. Physical location

The site consists of a residential property located at 25 Jacamar Court, Springboro, Warren County, Ohio 45066. Latitude: 39.5641330, Longitude: 84.2443399. The neighborhood surrounding the site is residential.

An Environmental Justice (EJ) analysis for the site was conducted. Screening of the surrounding area used Region 5's EJ Screen Tool (which applies the interim version of the national EJ Strategic Enforcement Assessment Tool (EJSEAT)). Region 5 has reviewed environmental and

demographic data for the area surrounding the site at 25 Jacamar Court, Springboro, Warren County, Ohio, and determined there is a low potential for EJ concerns at this location.

3. Site Characteristics

The site included a residential structure involved in a fire on February 4, 2015. During a fire investigation on February 9, 2015, shock sensitive chemicals exploded and burned. The Ohio EPA requested EPA assistance on February 10, 2015. The Clearcreek Fire Department requested from EPA assistance on February 20, 2015.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

EPA confirmed the presence of a threat of release of hazardous substances, pollutants, or contaminants at the site as defined by Section 101(14) of CERCLA, including the presence of Ferric Chloride, Methanol, Acetone, Cobalt Chloride, Mercury, Hydrochloric Acid, and Toluene. EPA samples documented containers with flashpoints of: 33 degrees F, 59 degrees F, and 136 degrees F, which is considered RCRA characteristic for flammability. EPA samples also documented containers with pH <1 which is considered RCRA characteristic for corrosivity. Chemical containers were unsecured and damaged, mixed with the fire debris. Chemical waste was observed in the fire debris, run-off, and swimming pool.

5. NPL status

The site is not on the National Priorities List (NPL).

6. Maps, pictures, and other graphic representations

Figure A-1 Photos

B. Other Actions to Date

1. Previous actions

This Action Memo documents previous actions by local response agencies in the Description Section (Section II.A.1).

2. Current actions

EPA initiated an emergency removal action at the site on February 12, 2015 with mobilization of personnel and equipment to the site. Emergency removal activities completed to date include: establishing a Unified Command with local, state, and federal agencies, site security, air monitoring, segregation of unknown chemicals and fire debris, and preparing waste for off-site disposal.

These response actions will not impose a burden on affected property disproportionate to the extent to which that property contributes to the conditions being addressed. Prior to initiating the emergency removal action, the property owner signed a site access agreement and authorized disposal of all materials from the site.

C. State and Local Authorities' Roles

No other local, state, or federal agency was in the position or had the resources to independently implement an effective response action to the chemicals. On February 10, 2015, the Ohio EPA requested EPA assistance with the removal of chemicals and contaminated debris. On February 20, 2015, the Clearcreek Fire Department requested EPA assistance.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at the Jacamar Fire Response Site present a threat to the public health or welfare, and the environment and meet the criteria for an emergency response removal action as provided for in the NCP, 40 C.F.R. § 300.415(b)(2). These criteria include, but are not limited to, the following:

Actual or potential exposure to nearby human populations, animals or the food chain from hazardous substances or pollutants or contaminants;

Unknown chemicals were involved in the February 4, 2015 residential fire. During the February 9, 2015 fire investigation, a shock sensitive chemical exploded and burnt. On February 10, the Ohio EPA requested EPA assistance. On February 11, 2015, the property owner informed the fire investigation team that the basement of the residence contained a chemical lab with Picric Acid, Mercury, and Sodium Cyanide. EPA documented the following chemical container labels: Ferric Chloride, Methanol, Acetone, Cobalt Chloride, Mercury, Hydrochloric Acid, and Toluene. EPA samples documented containers with flashpoints of: 33 degrees F, 59 degrees F, and 136 degrees F, which is considered RCRA characteristic for flammability. EPA samples also documented containers with pH <1, which is considered RCRA characteristic for corrosivity. Chemical containers were unsecured and damaged. Chemical waste was observed in the fire debris, run-off, and swimming pool.

Shock sensitive and uncontrolled hazardous waste created a potential exposure to adjacent residential areas within 200' of the site.

Actual or potential contamination of drinking water supplies or sensitive ecosystems;

The unsecured chemical waste in the fire debris, if not removed from the environment, would have entered an adjacent tributary and been discharged into the Great Miami River near the spill location.

High Levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate;

The unsecured chemical waste in the fire debris, including Mercury, Ferric Chloride, Solvents, and Sodium Cyanide were found throughout the property. Due to the fire suppression activities, chemical waste was observed in surrounding soil and a swimming pool.

Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

The unsecured chemical waste in the fire debris was documented throughout the residential property. Any rain event would have caused the chemical waste to migrate downgradient to surface waterways. Unstable chemicals were exposed to winter temperatures as low as 0 degrees F and precipitation, creating a migration pathway due to further release of contents.

Threat of fire or explosion;

Unknown chemicals were involved in the February 4, 2015 residential fire. During the February 9, 2015 fire investigation, a shock sensitive chemical exploded and burnt. On February 10, the Ohio EPA requested EPA assistance. On February 20, 2015, the Clearcreek Fire Department requested EPA assistance.

The availability of other appropriate federal or state response mechanisms to respond to the release;

No other local, state, or federal agency was in the position or had the resources to independently implement an effective response action to the chemicals. On February 10, 2015, the Ohio EPA requested EPA assistance with the removal of chemicals and contaminated debris. On February 20, 2015, the Clearcreek Fire Department requested EPA assistance.

IV. ENDANGERMENT DETERMINATION

Given the site conditions, the nature of the known and suspected hazardous substances on site, and the potential exposure pathways described in Sections II and III above, actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response actions selected in this Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

The response actions described in this memorandum directly address actual or potential releases of hazardous substances on site, which may pose an imminent and substantial endangerment to public health, or welfare, or the environment. Removal activities on site will include:

- 1) Developing and implementing a site Health and Safety Plan;
- 2) Conducting air monitoring;
- 3) Providing site security;
- 4) Segregation of chemicals to stabilize the incompatible and explosion hazard;
- 5) Characterizing, removing, and properly disposing of unknown chemicals, chemical containers, un-containerized mercury, contaminated soil, and debris in accordance with EPA's Off-Site Rule (40 CFR § 300.440);
- 6) If necessary, removal of contaminated residential foundation;
- 7) Post removal soil sampling; and
- 8) Grading and hydro-seeding the site.

The removal action will be conducted in a manner not inconsistent with the National Contingency Plan (NCP). The OSC has initiated planning for provision of post-removal site control consistent with the provisions of Section 300.415(l) of the NCP. Elimination of all hazardous substances is expected to minimize the need for post removal site control.

Off-Site Rule

All hazardous substances, pollutants, or contaminants removed off-site pursuant to this removal action for treatment, storage, and disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by U.S. EPA, with the U.S. EPA Off-Site Rule, 40 C.F.R. § 300.440.

2. Contribution to remedial performance

The proposed action will not impede future actions based on available information. At this time it is not known if long-term remedial actions will be needed for the site.

3. Engineering Evaluation/Cost Analysis (EE/CA)

Not Applicable

Applicable or relevant and appropriate requirements (ARARs)

All applicable and relevant and appropriate requirements (ARARs) of federal and state law will be complied with to the extent practicable. The OSC submitted a request dated March 4, 2015, to Dale farmer, Ohio EPA Southwest District Office, requesting state ARARs for the site. Any state ARARs identified in a timely manner will be complied with to the extent practicable.

Project Schedule

The removal activities are expected to take 20 on-site working days to complete.

Estimated Costs

The detailed cleanup contractor cost is presented in Attachment I and the Independent Government Cost Estimate is presented in Attachment IV. Estimated project costs are summarized below:

<u>Regional Removal Allowance Costs</u>	
Total Cleanup Contractor Costs (Includes a 20% contingency)	\$ 276,000
<u>Other Extramural Costs Not Funded from the Regional Allowance</u>	
Total START, including multiplier costs	\$ 60,000
Subtotal, Extramural Costs	\$336,000
Extramural Costs Contingency (15% of Subtotal, Extramural Costs)	\$ 50,000
TOTAL REMOVAL ACTION PROJECT CEILING	\$ 386,000

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants, or contaminants at the site which may pose an imminent and substantial endangerment to public health and safety and the environment. These response actions do not impose a burden on the affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Given the site conditions, the nature of the hazardous substances and pollutants or contaminants documented on site, and the potential exposure pathways to nearby populations described in Section II, III, IV, and V above, actual or threatened releases of hazardous substances and pollutants or contaminants from this site, if not addressed by implementing or delaying the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment, increasing the potential that hazardous substances will be released, thereby threatening the adjacent population and the environment.

VII. OUTSTANDING POLICY ISSUES

None.

VIII. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this site is contained in the Enforcement Confidential Addendum.

The total EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$663,531.¹

$$(\$386,000 + \$35,370) + (57.47\% \times \$421,370) = \$663,531$$

IX. RECOMMENDATION

This decision document represents the selected removal action for the Jacamar Fire Response Site, located in Springboro, Warren County, Ohio, developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based upon the Administrative Record for the site (Attachment II). Conditions at the site meet the NCP Section 300.415(b) criteria for a removal, and I recommend your approval of the proposed removal action.

¹ Direct Costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.

The total removal action project ceiling, if approved, will be \$386,000. Of this, as much as \$325,000 comes from the Regional removal allowance.

APPROVE: 
Director, Superfund Division

DATE: 3-17-15

DISAPPROVE: _____
Director, Superfund Division

DATE: _____

Enforcement Addendum

Figures:

A-1 Photographic Documentation

Attachments:

- I. Detailed Cleanup Contractor Cost Estimate
- II. Administrative Record Index
- III. Independent Government Cost Estimate

cc: Sherry Fielding, U.S. EPA, 5104A
(fielding.sherry@epa.gov)
Valincia Darby, U.S. Department of Interior, w/o Enf. Attachment
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Scott Nally, Director, OEPA, w/o ENF Addendum
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Mike DeWine, Ohio Attorney General, w/o Enf Addendum
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Dale Farmer, OEPA, w/o Enf Addendum
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**NOT RELEVANT TO SELECTION
OF REMOVAL ACTION**

ENFORCEMENT ADDENDUM

HAS BEEN REDACTED – THREE PAGES

ENFORCEMENT CONFIDENTIAL

NOT SUBJECT TO DISCOVERY

FOIA EXEMPT

NOT RELEVANT TO SELECTION

OF REMOVAL ACTION

FIGURE A-1
PHOTOGRAPHIC DOCUMENTATION



Photo 1: Shock sensitive chemical explosion during fire investigation on Feb 9, 2015



Photo 2: EPA crew removing chemicals from basement on Feb 27, 2015



Photo 3: Unknown chemicals in fire debris within basement

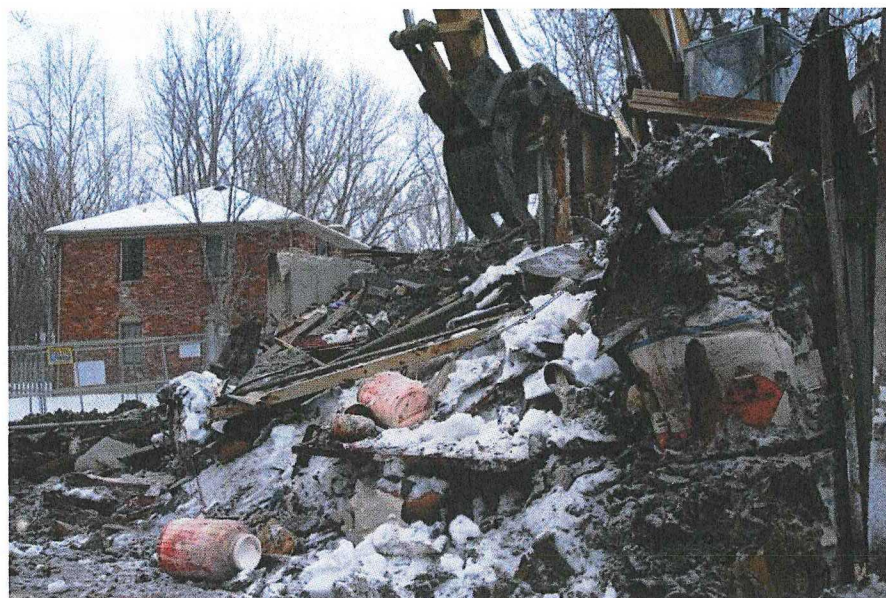


Photo 4: EPA crew stabilizing unknown chemicals in the fire debris

ATTACHMENT I

DETAILED CLEANUP CONTRACTOR ESTIMATE

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NOT RELEVANT TO SELECTION

OF REMOVAL ACTION

**ATTACHMENT II
U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION
ADMINISTRATIVE RECORD
FOR
JACAMAR FIRE RESPONSE ER SITE
SPRINGBORO, WARREN COUNTY, OHIO**

**ORIGINAL
FEBRUARY, 2015**

NO.	SEMS ID	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	916351	2/11/15	Billman-Kotsko, J., OEPA	Durno, M., U.S. EPA	Letter re: Request for U.S. EPA Assistance with an Emergency Removal Action	1
2	917522	2/15/15	Renninger, S., U.S. EPA	Distribution List	Pollution Report (POLREP) # 1 - Initial	8
3	916350	2/20/15	Kidd, B., Clearcreek Fire District	Renninger, S., U.S. EPA	Letter re: Request for U.S. EPA Assistance with an Emergency Removal Action	1
4	917523	2/20/15	Renninger, S., U.S. EPA	Distribution List	Pollution Report (POLREP) # 2 - Progress	7
3	-	-	Renninger, S., U.S. EPA	Karl, R., U.S. EPA	Action Memorandum re: Request for an Emergency Removal Action at the Jacamar Fire Response Site (<i>Portions of this document have been redacted</i>)	-

ATTACHMENT III

INDEPENDENT GOVERNMENT COST ESTIMATE

HAS BEEN REDACTED – TWO PAGES

NOT RELEVANT TO SELECTION

OF REMOVAL ACTION